

PHENIX WEEKLY PLANNING



6/7/2012
Don Lynch

TECHNICAL
SUPPORT
2012

This Week

- Cu-Au Run continues
- Controlled Maintenance access this week
- sPHENIX design and analysis continues
- 2012 Shutdown prep continues

Next Week

- Cu-Au Run continues
- Next scheduled maintenance access day Wednesday 6/20???? Or none
- sPHENIX design and analysis continues
- 2012 Shutdown prep continues
- Other Business

TECHNICAL SUPPORT 2012

Prep for shutdown	2/1-6/25/2011
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
AH Crane Upgrade (variable speed & wireless remote)	
End of Run Party	6/22/2012
Run 12 Ends	6/25/2012
Shutdown Standard Tasks	6/25-7/20/2012
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
VTX Strip-pixel post run tests	6/25-6/30/2012
FVTX post run tests	7/1-7/8/2012
Disassemble VTX/FVTX services	7/9-7/27/2012
July 4 th Holiday	7/4/2012
Open Station 1 North, remove MPC North for repairs	7/9-13/2012
RPC1 North Cooling Upgrade	7/9-13/2012
Remove VTX/FVTX and transport to Chemistry Lab	7/30/2012
Remove MMS & MMN vertical East lampshades	7/23-7/27/2012
Summer Sunday (8/5) Prep and teardown	8/1-8/7/2012
Summer Sunday (RHIC)	8/5/12

TECHNICAL SUPPORT ZONE

MuTr South Station 1 work	
Install access (Sta. 1 work platforms)	7/30-8/3/2012
Disconnect Cables, hoses etc, ID/label all	8/6-8/10/2012
Remove FEE plates and chambers	8/13-8/17/2012
Station 2 Terminators and manifold upgrade through access opened by station 1 removal	8/20/-8/31/2012
MPC South repairs	8/20-9/15/2012
RPC 1 South cooling upgrade	8/20-9/15/2012
Labor Day Holiday	9/3/2012
MuTr South Station 1 work (Cont'd)	
Clean/install new MuTr Sta. 1 chamber parts and upgrades (concurrent At RPC Factory)	8/20/-9/7/2012
Re-install chambers and FEE plates	9/10-9/14/2012
Re-cable, re-hose and test	9/10-9/28/2012
re-capacitation and air manifold upgrades	
Station 3 North and South (upper half)	7/23-9/30/2012
Repair upgrade, reassemble VTX/FVTX	7/23-10/5/2012
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/8-11/9/2012
Substation breaker upgrade/test (CAD)	8/20-9/30
AH utility power distribution upgrade	8/20-9/30
DC West maintenance (replace window)	9/15-10/15
RPC stations 1 and 3, north and south maintenance	As required
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Open Station 1 North, re-install MPC North	10/16-10/26/2012
RPC1 North Cooling upgrade (if not completed earlier)	10/16-10/26/2012

Veterans Day Holiday	11/12/2012
Pre-run commissioning and prep for run 13	11/1-12/31/2012
Prep for EC roll in	11/12-
11/16/2012	
Roll in EC	11/19-11/23/2012
Thanksgiving Holidays	11/22-23/2012
Prep IR for run	11/26-12/3/2010
Pink/Blue/White sheets	12/3-12/21/201
Christmas Holidays	12/24-25/2012
Start run 13	1/1/2013

New Electrical Work for 2012 Shutdown, not yet scheduled

1. Support CAD replacement of Assembly Hall 480V Fused Switch Panels #8H-1, 8H-2, and 8 EMH1. Coordinate temporary power patch while work is being performed and minimize impact on shutdown work.
2. Add the Assembly Hall Crane lockout/contactors/ indicator light key switch circuit - similar to IR Crane.
3. Add Transient Surge Suppressor to 3 phase power panel on the Central Magnet Bridge.
4. The Gas Mixing House Breaker Panel for the Gas Mixing side is almost out of spare breaker slots and needs to be reviewed for increased capacity panel to replace it.
5. New computer rack replacements/additions for upcoming Run 13 & Rack Room computer infrastructure changes involving power distribution circuit (UPS and normal AC power) re-work.

TECHNICAL SUPPORT ZONE

Additional Work for 2012, not yet scheduled

1. Replaced aging magnet hoses (CM only)
2. identify obsolete services passing through sill and remove them.
3. Revisit cover for services coming from IR through sill.
4. Plan for stripping out TEC electronics and services to free up TEC racks.
5. Add limit switch and improved spooling control for window washer cable.

Shutdown 2012 PHENIX Technician Assignments:

Carter B. Overall supervision, work planning coordination

Chris P. MuTr/MuTrigger station 2, 3 N & S, general mech support

Frank T. MuTr Station1 South, RPC Factory area for MuTr, general elect support

Jimmy L. MPC mechanical, BBC, Survey, MPC-Ex, general mech support

John T. DC West, gas & cooling systems, general mech support

Kenny J. RPC, general mech support

Mike L. VTX/FVTX, general upgrades support

Sal P. MPC electronics, general elect support

Assignments are for emphasis, anyone/everyone maybe working on any project at any time.



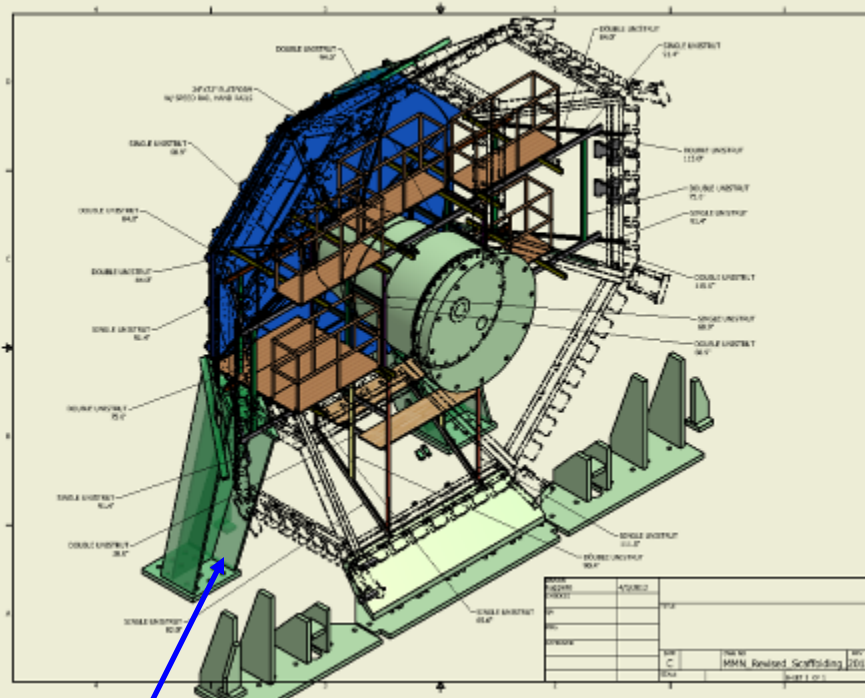
DC West Repairs
(DC East is shown)





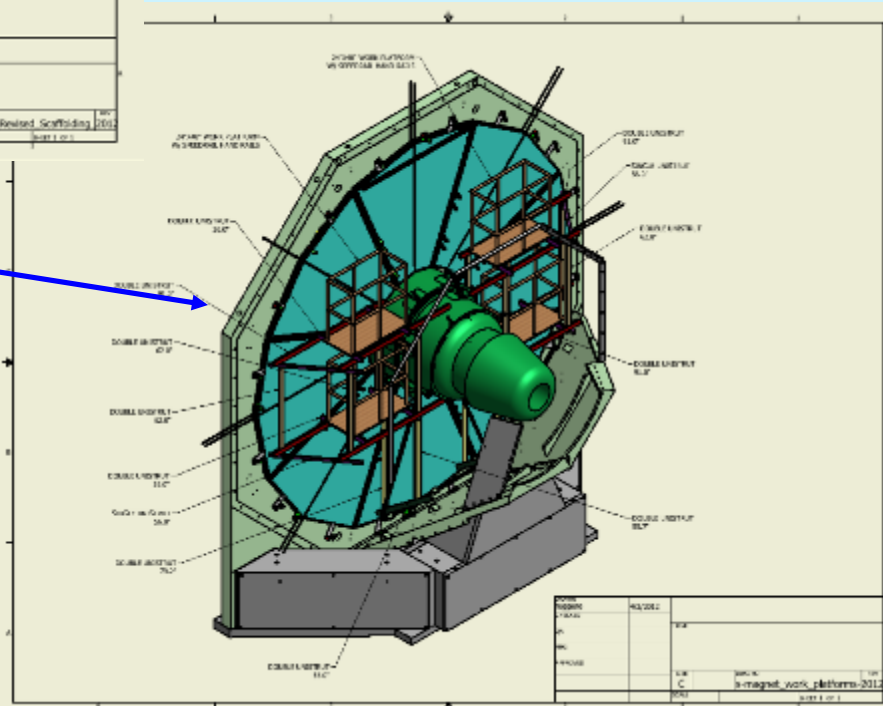
AH Crane variable speed drive
and wireless remote upgrade ??

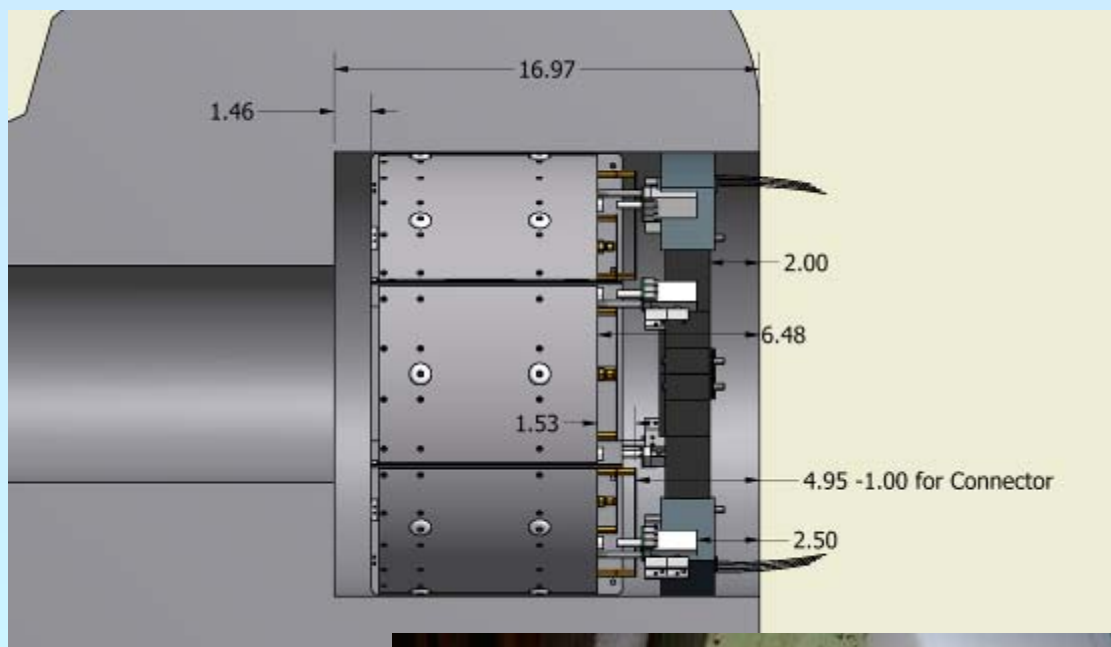




North & South internal work platforms for next summer's shutdown

Sent analyses to C-A ESRC for review last week





MPC-EX Positioning with respect to MPC

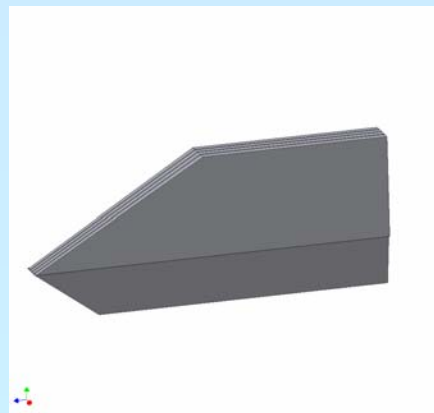
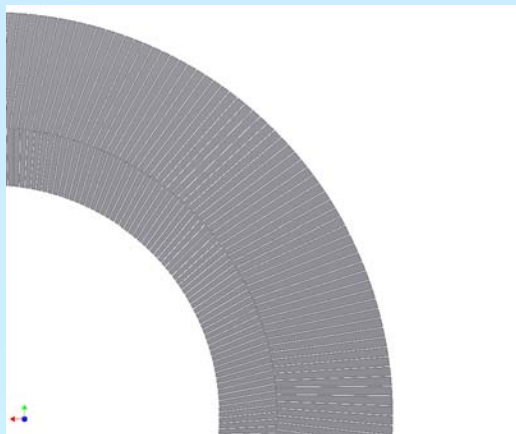


SULI Engineering Students working for PHENIX this summer:

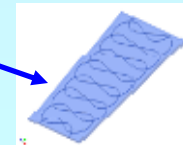
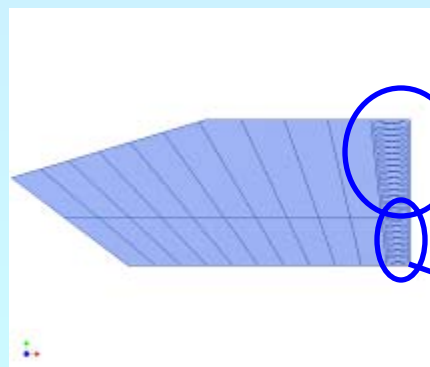
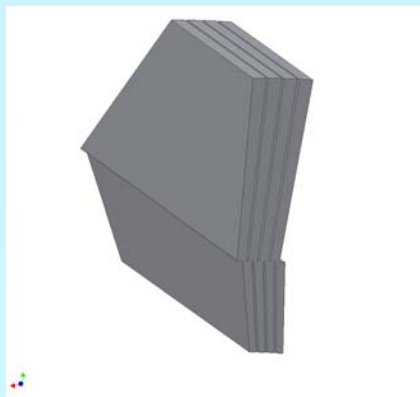
Louie-John Mistretta - sPHENIX design and analysis w/ D. Lynch

Patrick Montalto - sPHENIX design and analysis w/ E. Kistenev

Ammar Morgan - Low Voltage Distribution Controller Software Design w S. Boose

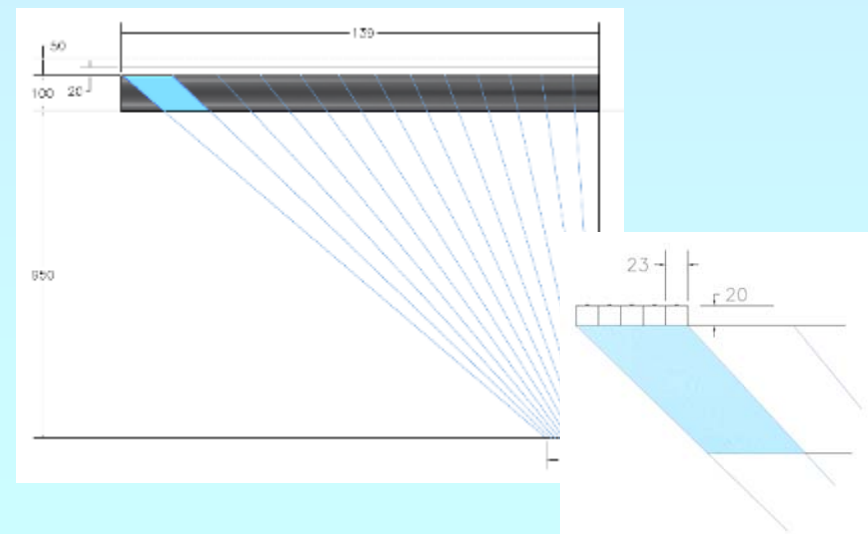
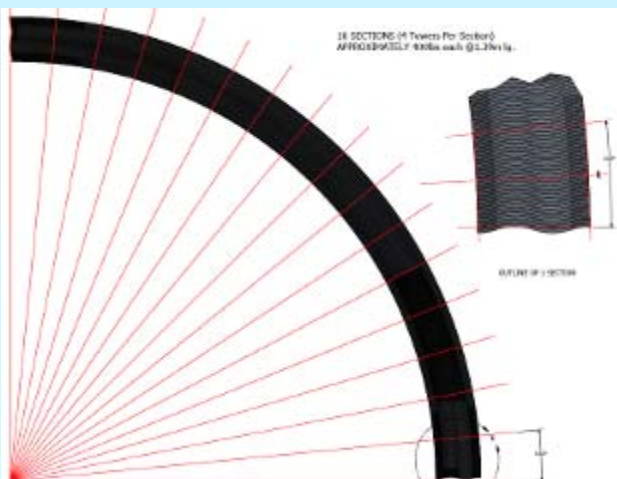
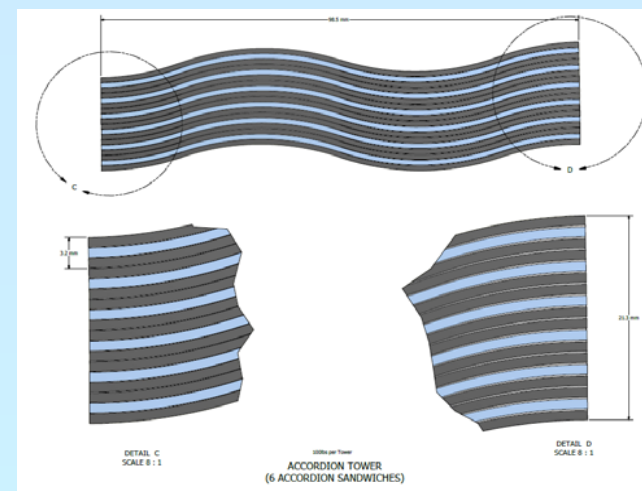
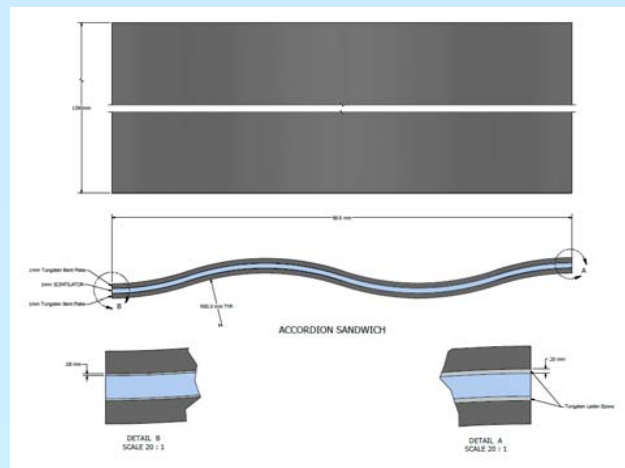


HCal Views

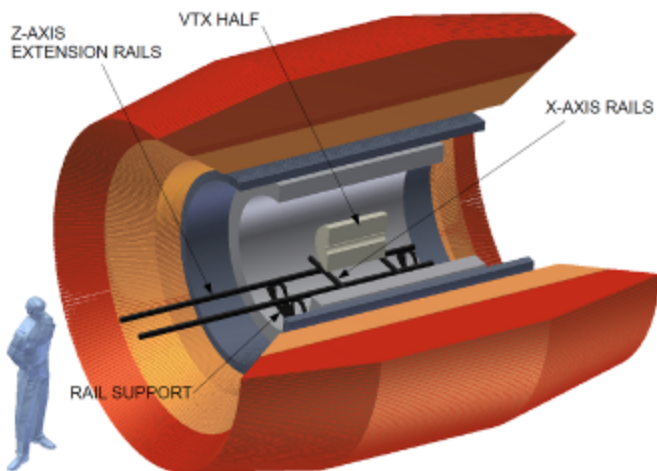


Inner and outer Hadronic Calorimeters
 256 segments each, steel and scintillator
 0.9 meter total thickness, ~4.6 meters long.
 Note how the outer and inner steel segments
 are angled with respect to radial lines (by 5
 degrees, with the inner HCal steel angled in the
 opposite direction of the outer HCal steel). The
 inner and outer steel plates are also offset by
 a $\frac{1}{2}$ period.

HCal Scintillator Concept

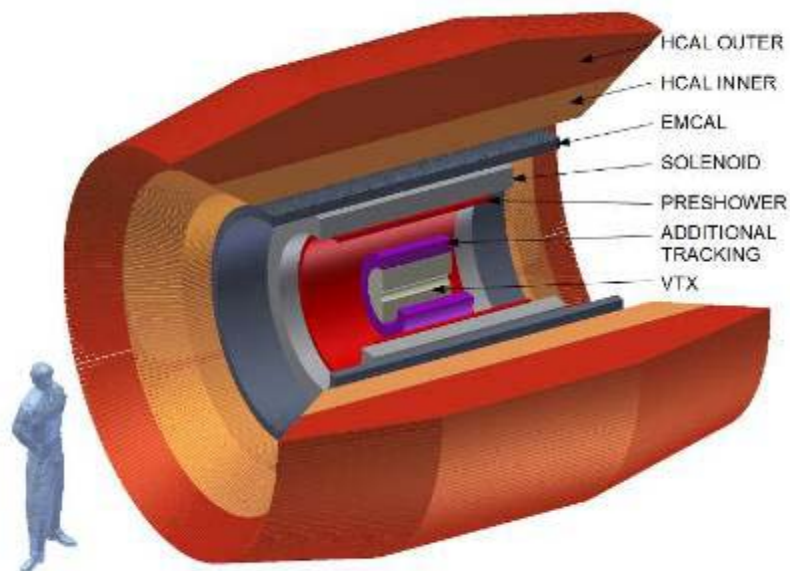


Electromagnetic calorimeter segments using "accordion" shaped scintillators and tungsten plates to optimize detector sampling



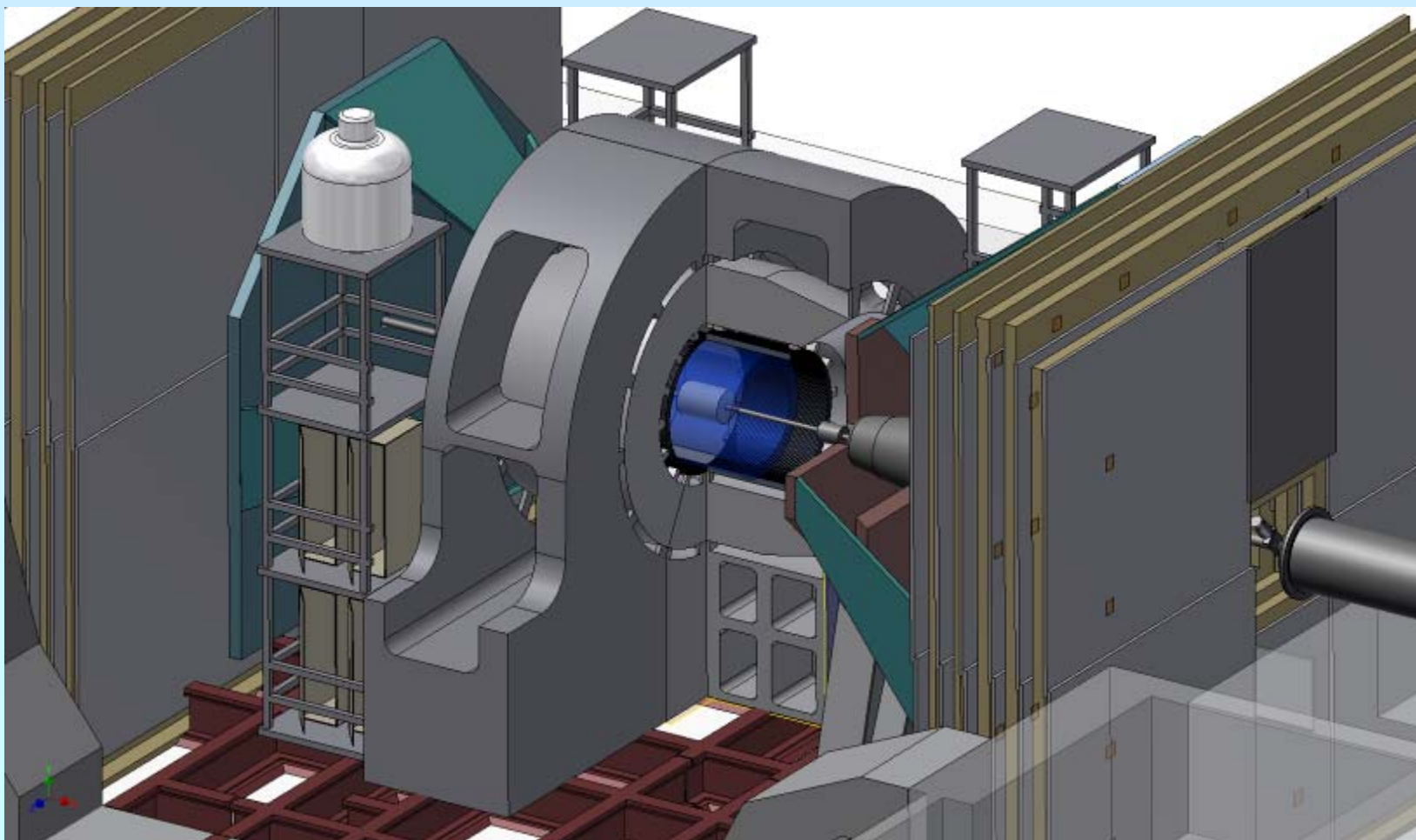
VTX support and maintenance concept

sPHENIX potential upgrades



sPHENIX overall assembly, integration and maintenance concept

TECHNICAL SUPPORT



1. Configuration Management - New Procedures in progress.
2. Upcoming site-wide ISO 14001 & OHSAS 18001 Registration Audit, week of June 18:

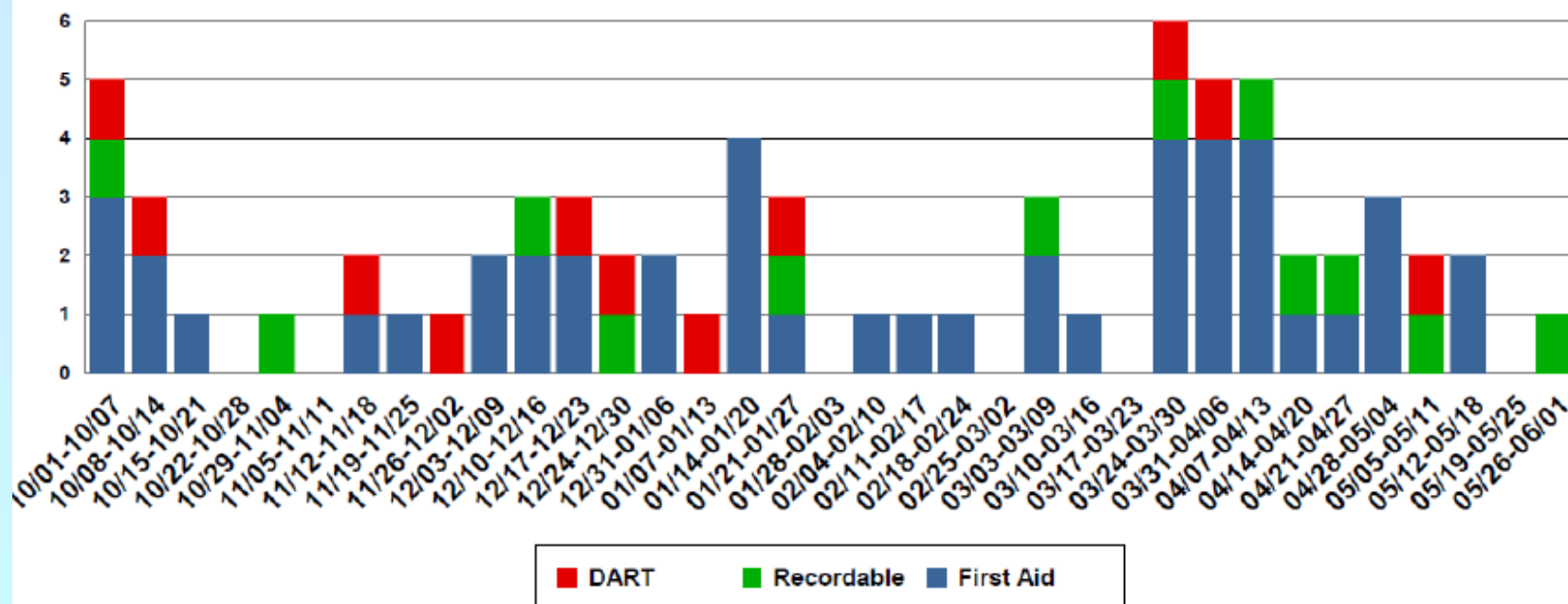
C-A D will have a 45 minute presentation for managers, supervisors, etc. All sessions are 11:15 - Noon, Bldg 911 Snyder Seminar Hall:

Remaining days: Friday June 8, Thursday June 14

3. 3rd Annual BNL Safety Day Yesterday 11:00 -1:30 at Berkner Hall. Prizes, giveaways, seminars, hands on learning activities, demos and testing,
4. PHENIX Shutdown review with CAD ESRF June 20?



Injuries Per Week (FY) As of 6/1/2012



Injury Status:

FY12 YTD: DART – 11, TRC – 23, First Aid – 46

FY11: DART – 27, TRC – 42, First Aid – 45

FY10: DART – 19, TRC – 33, First Aid – 52

FY12 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seq/OccInj/BNLInjuries.aspx>

Recent Injuries

5/31/12	Recordable	An employee was injured by a sharp object. After transportation to a local ER, prescription medication was provided, making this a recordable injury. An investigation is in progress.
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Recent Events		
5/29/12	Non-Reportable	There was a LINAC operator error that caused elevated radiation levels in the booster tunnel due to beam misalignment. This caused elevated radiation levels in the booster tunnel, along the side wall, within the established Controlled Area. There was no alarm in the control room as the original intent was only to provide local alarm. The LINAC was operating within its ASE limits. BNL electrical workers in the tunnel, GERT trained, wearing TLDs, and outside of the Controlled Area noticed the local alarm and informed the control room, as trained. The workers were in the booster injection straight section of the tunnel. The Linac operator was able to ramp the magnet down to the correct current in less than 2 minutes. The control room operator responded appropriately and called the Radiation Controls Division (RCD) as per procedure. RCD personnel responded. Radiation surveys performed after replicating the event indicated that the electrical workers received no additional dose above background. The Linac Commissioning Coordinator was contracted as well. (Event Link)
5/28/12	Non-Reportable	Fire/Rescue responded to an alarm of fire at Bldg. 361, Apt. 1. The alarm would not reset and the site super was notified to call-in alarms personnel. (Event Link)
5/26/12	Non-Reportable	Fire/Rescue responded to notification of an ODH Alarm at Bldg 1002. The cause of the ODH alarm was a faulty detector. C-AD personnel to replace detector. (Event Link)
5/25/12	Non-Reportable	Fire/Rescue responded to an alarm of fire at Bldg 170. The smoke detector was activated due to cooking and the system reset with no issues. (Event Link)
5/25/12	Non-Reportable	Fire/Rescue responded to a fire alarm at Bldg. 459 due to a smoke detector in Room 56 tripping which also resulted in the sprinkler system being charged. No water was released from the sprinkler system into the building. The building occupants evacuated the building upon hearing the alarm, Fire/Rescue personnel were able to reset the alarm and after a search of the building the occupants were allowed by Fire/Rescue to re-enter the building. Fire Alarm Electricians and the South Complex Plumber were dispatched to the scene and the system was still in the process of being restored at 1520 which is when the BNL Event Categorizer was notified. (Event Link)

6/7/12

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AirGas Technician sent to do maintenance on PHENIX AR Dewar without Escort and/or training



Where To Find PHENIX Engineering Info



3 More Weeks of Run 12 ! Then the Shutdown Begins.

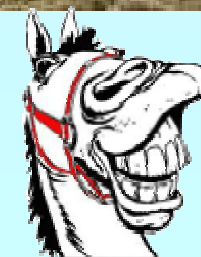


Belmont Stakes Saturday 6/9/12:

1	Street Life	12-1
2	Unstoppable U	30-1
3	Union Rags	6-1
4	Atigun	30-1
5	Dullahan	5-1
6	Ravelo's Boy	50-1
7	Five Sixteen	50-1
8	Guyana Star Dweej	50-1
9	Paynter	8-1
10	Optimizer	20-1
11	I'll Have Another	4-5
12	My Adonis	20-1



My Prediction: 11-9-1



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

